The Franklin County Auditor's Geographic Information System

Franklin County Auditor
Joseph W. Testa

Procedural Guide Prepared By
The Real Estate Division/GIS

373 South High Street
Columbus, Ohio 43215-6310
Tel.: 614/462-7272 Fax: 614/462-7298
http://www.franklincountyohio.gov/auditor/

Revised July 2004

FRANKLIN COUNTY GIS
TABLE OF CONTENTS

SUMMARY OF THE FRANKLIN COUNTY AUDITOR'S GEOGRAPHIC INFORMATION SYSTEM

A Geographic Information System (GIS) is a computer graphic system that allows the input, query, manipulation, display and output of geographically referenced information.

The Franklin County Auditor's Geographic Information System was launched in February 1987. The goal of the project was to create a single source of digital data containing graphic and nongraphic real estate appraisal information captured on an accurate planimetric base map foundation.

Within the Auditor's Real Estate Division, one of the many duties performed by the Auditor's Office is the important and time-consuming task of appraising and reappraising each of the 395,000 plus parcels of real estate within the county. This ongoing process demands extensive information management capabilities now being provided by the GIS.

The GIS enhances the appraisal process by greatly increasing the Auditor's information storage, retrieval, inventory and analysis capabilities, ultimately resulting in equalized taxation for the taxpayers of Franklin County.

The initial Franklin County Auditor's GIS, containing records of property characteristics, location, ownership and valuation, consisted of:

- **Aerial photographs at four scales: 1" = 1,320' for developing the ground control network; 1" = 660' for producing the planimetric base map; 1" = 600' for creating orthophotos; and 1" = 800' for periodic updating.**
- **First-order Global Positioning System (GPS) satellite control for 96 horizontal survey points, including azimuths: 43 existing monuments, 47 new monuments and 6 additional monuments for photo control.**
- **Analytical triangulation, a method for extension or densification of ground control, performed using a fully analytic stereoplotter and state-of-the-art bundle adjustment software with refinements.**
- **2,663 digital orthophotos with 12-inch ground pixel resolution (for use with appraisal mapping).**
- **2,663 planimetric maps photo-compiled at 1" = 100' scale.**
- **2,663 appraisal maps ortho-compiled at 1" = 100' scale for more than 350,000 parcels tied to the planimetric base.**
- **2,663 2-foot contour maps when compiled at 1" = 100' scale, tied to the planimetric and cadastral base.**

The Franklin County Auditor's Geographic Information System project is unique because it was developed especially to meet the needs of the Auditor's Office. Appraisal, planimetric and cadastral base map information was captured by the Auditor's Office and the Auditor is maintaining all nongraphic appraisal information along with some elements of the planimetric base map that relate to the appraisal process. The Franklin County Engineer's Office assists in maintaining right-of-way and other cadastral information.

COUNTY AUDITOR'S
RECIPROCAL DATA AGREEMENT (CARDA)

CARDA was established in 1995 to encourage intergovernmental cooperation by exchange of data, thereby enhancing the Auditor's GIS.

CARDA members provide the Auditor's Office with detailed information regarding building permits, school expansion and building plans, underground tanks, park locations and amenities, and any other data that can be useful in the Auditor's appraisal process. In exchange for this information, CARDA members are provided with quarterly updates on a CD-ROM at no charge. This not only provides them with up-to-date information that can be used to meet the needs of the individual agency, but it also provides them with a permanent record of a periodic snapshot in time.

In conjunction with the distribution of the CD-ROM, a forum is scheduled where CARDA members are provided with an update of the latest additions or enhancements to the Auditor's database. In addition, one of the CARDA members provides a presentation explaining how their agency is using the Auditor's data, which is then followed by an open discussion. There are approximately 80 CARDA members from municipalities, villages, townships, county agencies, state agencies, school districts, libraries and area commissions.

PRODUCTS AND SERVICES

The Franklin County Auditor's GIS offers a range of products and services to government agencies, private firms, educational institutions, nonprofit organizations and the public. These offerings include orthophotography (aerial photographs), public access plots, website (http://www.franklincountyohio.gov/auditor/), custom map plots and other custom services and quarterly CD-ROM releases.

Products obtained in the Public Information Area on the 20th floor of the Franklin County Courthouse include orthophotographs, planimetric maps, topographic base maps, property maps, or combinations of these maps for all of Franklin County. Plots include a variety of map products produced at customized scales, map sheet formats or feature/symbology combinations. Plotter size and scale restrictions will influence the particular map format and the type of features and symbology that can be displayed. Custom services include tabular reports of geographic information, special geographic analysis or other related services. More information about these products and services can be obtained by calling or visiting the GIS Department (614-462-7272), the Public Information Area (614-462-4663) or email (mailto:joe_testa@franklincountyohio.gov).

Map products are produced on 30" x 36" paper (E size) and 8½" x 11" paper (A size) color plots. These maps have been compiled to meet or exceed National Map Accuracy Standards at 1" = 100' scale. The scale of the maps you receive will depend upon the specifics of your request. Also offered are index maps showing the layout of 1" = 100' map facets for Franklin County and GIS map plots showing specified property information on letter-sized paper.

Most plots can be produced at a variety of scales, normally ranging from 1" = 100' to 1" = 2,000'. These maps can be produced on various sheet sizes. Customers can also request that these maps be produced with selected map features and custom symbology. All maps adhere to National Map Accuracy Standards at the original compilation scale of 1" = 100' with 2' contours based on NORTH AMERICAN VERTICAL DATUM 1929 (when displayed) and 500' grid ticks based on the OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE and NORTH AMERICAN DATUM 1983.

Included in the Auditor's comprehensive web site is the GIS mapping program that offers a variety of property data. This data includes parcel ownership and appraisal information, including a photo of the property. Links to other municipalities web pages to include items such as zoning; some utilities etc. A search program is available and enables the user to locate a specific parcel map. The property maps include lot dimensions, building sketches, aerial photos, floodplain, aboveground utilities, streets and bridges. The custom mapping features enable the user to select specific maps, such as subdivisions, school districts, townships and zip codes. A variety of color-coded theme maps are also available for user-specified geographic areas, detailing the range of property values, building room counts, transfer amounts and dates. Custom reporting is available and provides a detailed, parcel-by-parcel updated listing of the requested theme information.

In addition, the Franklin County Auditor's GIS data is made available on CD-ROM in three formats: MetaMAP®, Data Exchange Format (DXF) and SHAPEFILES. Releases are updated quarterly at a cost of $10.00 per CD. Digital orthos are available in JPEG and MrSid® formats.

LAYERING CONCEPT USED IN THE FRANKLIN COUNTY AUDITOR'S GEOGRAPHIC INFORMATION SYSTEM

The Auditor's GIS database was designed to allow for maximum versatility and growth as additional information becomes available in digital form.

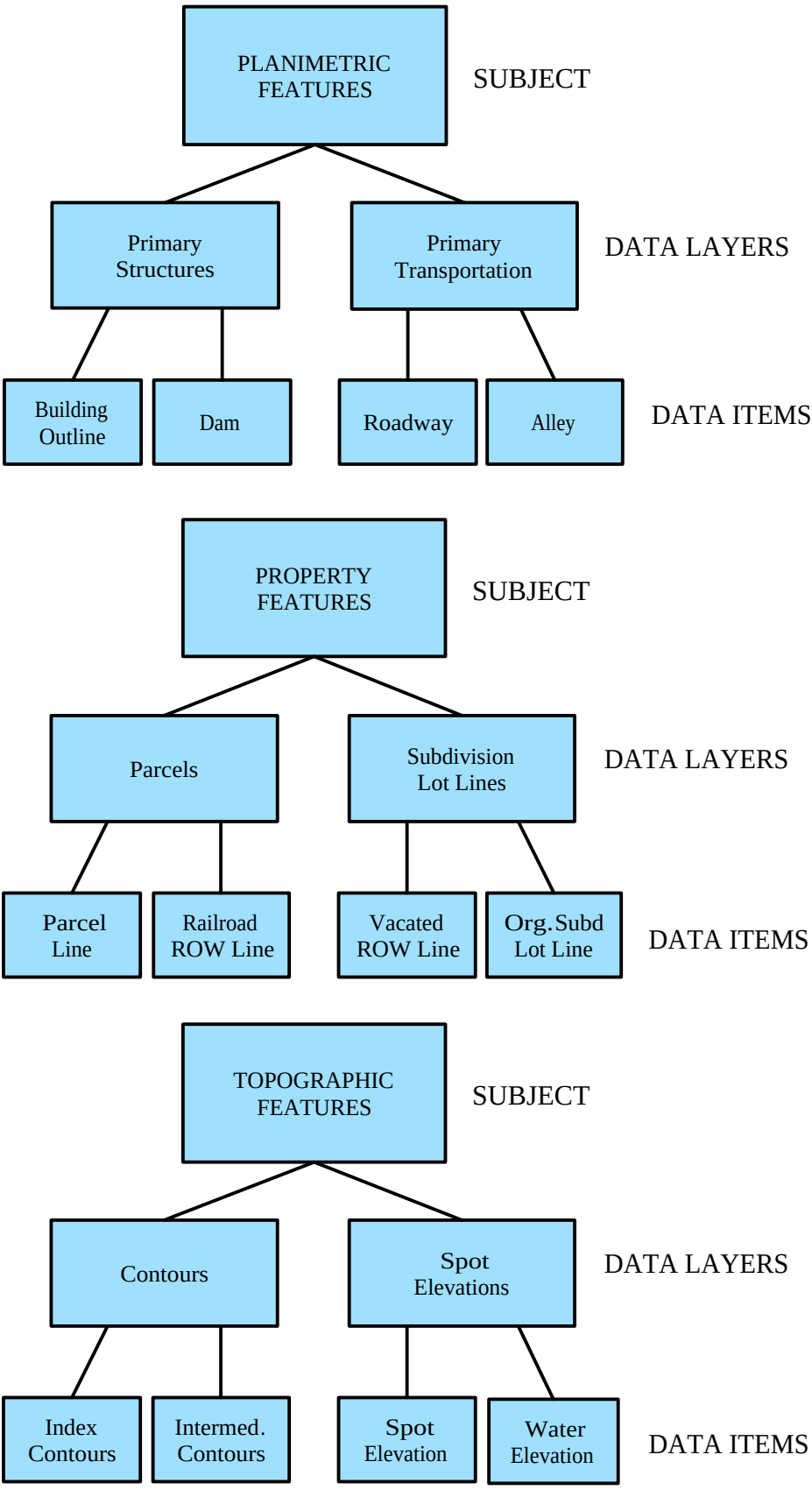
To allow for easy access, storage and manipulation of vast amounts of data, a "layering" concept was implemented as follows:

- **First, it was decided which subjects would contribute most to the accurate appraisal of real estate.**
- **These subjects were then divided into more specific categories and organized into data layers.**
- **Finally, these broad groups of data were further divided into individual entries, called data items.**

For example, a paved driveway would be classified in the following manner: Subject - planimetric feature, data layer - secondary transportation, data item - paved drives, which could then be accessed in the computer under the reference number of 09072.

The data layers and data items contained in the list that follows represent a logical and efficient layout of the planimetric, topographic and appraisal databases. To date, the Auditor's Office has compiled more than 60 layers of appraisal-related information. The current design of the system will allow for acquisition of 512 layers with a possible 255 items in each layer.

DATA LAYERS & I TEMS



DATA LAYER LIST

DATA ITEM	DATA LAYER	LAYER	LINE	PEN	DESCRIPTION
INTERMEDIATE CONTOURS	CONTOURS	6	92	2	GREEN, THIN LINE
INDEX CONTOURS	CONTOURS	6	93	3	RED, BOLD LINE
HIDDEN INTERMEDIATE CONTOURS	CONTOURS	6	94	2	GREEN, THIN DASHED LINE
HIDDEN INDEX CONTOURS	CONTOURS	6	95	3	RED, BOLD DASHED LINE
INTERMEDIATE DEPRESSION CONTOURS	CONTOURS	6	96	2	GREEN,THIN TICK LINES
INDEX DEPRESSION CONTOURS	CONTOURS	6	97	3	RED, BOLD TICK LINES
HIDDEN INTER DEPRESSION CONTOURS	CONTOURS	6	98	2	GREEN, THIN DASHED TICKS
HIDDEN INDEX DEPRESSION CONTOURS	CONTOURS	6	99	3	RED, BOLD DASHED TICKS
SPOT ELEVATIONS	SPOT ELEVATIONS	7	92	3	RED, SYMBOL
HIDDEN SPOT ELEVATIONS	SPOT ELEVATIONS	7	93	3	RED, SYMBOL
AIRFIELD PAVEMENT (RUNWAYS)	PRIMARY TRANS	8	2	4	YELLOW, BOLD LINE
AIRFIELD PAVEMENT (APRONS)	PRIMARY TRANS	8	3	4	YELLOW, THIN LINE
AIRFIELDS (UNPAVED RUNWAYS)	PRIMARY TRANS	8	4	4	YELLOW, BOLD DASHED LINE
ROADWAYS (PAVED)	PRIMARY TRANS	8	11	4	YELLOW, BOLD LINE
ROADWAYS (UNPAVED)	PRIMARY TRANS	8	12	4	YELLOW, BOLD DASHED LINE
ALLEYS (PAVED)	PRIMARY TRANS	8	13	4	YELLOW,THIN LINE
ALLEYS (UNPAVED)	PRIMARY TRANS	8	14	4	YELLOW, THIN DASHED LINE
NONVERIFIED ROADWAYS	PRIMARY TRANS	8	18	7	PURPLE, BOLD LINE
OVERPASSES/BRIDGES	PRIMARY TRANS	8	90	4	YELLOW, BOLD LINE
ROADWAYS UNDER CONSTRUCTION	PRIMARY TRANS	8	91	4	YELLOW, BOLD DASHED LINE
MAJOR WALKWAYS(pvd&unpvd)	SECONDARY TRANS	9	1	4	YELLOW, THIN LINE
DRIVES, PRK LOTS (PVD), PVT ACCESS RD	SECONDARY TRANS	9	70	4	YELLOW, THIN LINE
DRIVES, PARKING LOTS (UNPAVED)	SECONDARY TRANS	9	71	4	YELLOW, THIN DASHED LINE
HIGHWAY BERMS (PAVED)	SECONDARY TRANS	9	74	4	YELLOW, THIN LINE
PARKING LOT LABELS	SUPP TRANS ANNO	10	10	1	WHITE, POINT ANNO
SUPP TRANS ANNO (BIKEPATH,TUNNEL)	SUPP TRANS ANNO	10	11	1	WHITE, POINT ANNO
BUILDING OUTLINES	PRIMARY STRUCTURES	11	23	5	ORANGE, BOLD LINE
PRIMARY BUILDINGS(UNDER CONS.)	PRIMARY STRUCTURES	11	24	5	ORANGE, BOLD DASHED LINE
DAMS	PRIMARY STRUCTURES	11	25	5	ORANGE, BOLD LINE
UPDATED BUILDINGS	SEC STRUCTURES(TEMP)	12	19	7	PURPLE, THIN LINE
BUILDING OUTLINES	SECONDARY STRUCTURES	12	23	5	ORANGE, THIN LINE
BLD UNDER CONSTRUCTION & RUINS	SECONDARY STRUCTURES	12	24	5	ORANGE,THIN DASHED LINE
CONDO BUILDING OUTLINES	CONDO STRUCTURES	12	27	5	ORANGE, THIN LINE
MAJOR RET WALLS, BRIDGE ABUTMENTS	SECONDARY STRUCTURES	12	28	5	ORANGE, THICK SYMBOL LINE
MISC STRUCTURE (TOWERS,CANOPY ETC)	SECONDARY STRUCTURES	12	80	5	ORANGE, THIN DASHED LINE
ROOF SEPARATIONS	SECONDARY STRUCTURES	12	104	1	WHITE, THIN LINE
SUBSTATIONS	SECONDARY STRUCTURES	12	105	3	RED, THIN SYMBOL LINE
MISC STRCT ANNO (O/H WALK,COTA,ETC)	SUPP STRUCTURE ANNO	13	13	1	WHITE, POINT ANNO
MONUMENTS (STATUES)	MISCELLANEOUS SYMBOLS	14	1	1	WHITE, SYMBOL
SWIMMING POOLS	MISCELLANEOUS SYMBOLS	14	2	6	BLUE, SYMBOL
SWAMP SYMBOLS	MISCELLANEOUS SYMBOLS	14	78	6	BLUE, SYMBOL
RIVERS/CREEKS/LAKES/RES/PONDS	PRIMARY HYDROGRAPHY	15	37	6	BLUE, THICK DASHED LINE
DRAINAGE DITCHES/SWAMP OUTLINES	SECONDARY HYDRO	16	35	6	BLUE, THIN DASHED LINE
WATER ELEVATIONS	HYDROGRAPHY LEVELS	17	77	6	BLUE, SYMBOL
RAILROAD CENTERLINES & NAMES	RAILROADS	18	15	4	YELLOW,ATTRIBUTE, PATTERN
RAILROADS (ABANDONED)	RAILROADS	18	16	4	YELLOW, PATTERN

DATA LAYER LIST

DATA ITEM	DATA LAYER	LAYER	LINE	PEN	DESCRIPTION
TEMP ROAD CNTR & NAMES (NEW CONST)	RD NAMES & CENTERLINES	19	20	7	PURPLE, ATTIBUTE,PATTERN
TMP PVT RD CNTR & NAMES (NEW CONST)	RD NAMES & CENTERLINES	19	21	7	PURPLE, ATTRIBUTE, PATTERN
PUBLIC ROAD CENTERLINES & NAMES	RD NAMES & CENTERLINES	19	47	1	WHITE, ATTRIBUTE, PATTERN
PRIVATE ROAD CENTERLINES & NAMES	RD NAMES & CENTERLINES	19	57	1	WHITE, ATTRIBUTE, PATTERN
ROAD CNTR OUTSIDE RIGHT-OF-WAY	RD NAMES & CENTERLINES	19	81	2	GREEN, DASHED, ATTRIBUTE
RAMP CENTERLINES	RAMP CENTERLINE ANNO	19	123	1	WHITE, ATTRIBUTE, PATTERN
PUBLIC RD CNTR (LOCKOUT-UPDATE)	RD NAMES & CENTERLINES	19	147	1	WHITE, ATTRIBUTE, PATTERN
ROAD CENTERLINE INTERSECTIONS	RD CENTERLINE INTERSEC	20	3	1	WHITE, SYMBOL
WATER MANHOLES	UTILITIES (WATER)	21	7	6	BLUE, SYMBOL
FIRE HYDRANTS	UTILITIES (WATER)	21	8	6	BLUE, SYMBOL
VALVES	UTILITIES (WATER)	21	12	6	BLUE, SYMBOL
DRY HYDRANTS (NOT CONNECTED)	UTILITIES (WATER)	21	25	6	BLUE, SYMBOL
UPDATE HYDRANTS	UTILITIES (WATER)	21	88	7	PURPLE, SYMBOL
STORM SEWERS	UTILITIES (STORM)	22	7	5	ORANGE, SYMBOL
CATCH BASINS/CURB INLETS	UTILITIES (STORM)	22	10	5	ORANGE, SYMBOL
ENDS OF PIPE	UTILITIES (STORM)	22	49	5	ORANGE, SYMBOL
HEADWALLS	UTILITIES (STORM LINES)	23	26	5	ORANGE,THICK SYMBOL LINE
PAVED DRAINAGE DITCHES	UTILITIES (STORM LINES)	23	27	5	ORANGE, THIN DASHED LINE
MISCELLANEOUS DRAINAGE STRUCTURE	UTILITIES (STORM LINES)	23	30	5	ORANGE, THIN LINE
SANITARY MANHOLES	UTILITIES (SANITARY)	24	7	2	GREEN, SYMBOL
UTILITY POLES	UTILITIES (ELECTRIC)	25	5	3	RED,SYMBOL
ELECTRIC MANHOLES	UTILITIES (ELECTRIC)	25	7	3	RED,SYMBOL
GAS MANHOLES	UTILITIES (GAS)	27	7	4	YELLOW, SYMBOL
VALVES	UTILITIES (GAS)	27	12	4	YELLOW, SYMBOL
POLES (MISCELLANEOUS)	MISC UTILITY SYMBOLS	28	6	1	WHITE, SYMBOL
MANHOLES (MISCELLANEOUS)	MISC UTILITY SYMBOLS	28	7	1	WHITE, SYMBOL
SATELLITE DISHES	MISC UTILITY SYMBOLS	28	17	3	RED SYMBOL
ANTENNAS	MISC UTILITY SYMBOLS	28	26	3	RED SYMBOL
UNIDENTIFIED STRCT (ELECTRIC BOXES)	MISC UTILITY SYMBOLS	28	27	3	RED SYMBOL
TRANSMISSION LINES	MAJOR UTILITY LINES	29	75	3	RED, VERY THIN LINE
PIPELINES	MAJOR UTILITY LINES	29	76	1	WHITE, THICK DASHED LINE
PAV REC SURFACES (COURT,PLAYGND)	RECREATIONAL LINES	30	72	2	GREEN, THIN LINE
UNPAV REC SURFACES (TRACKS ETC)	RECREATIONAL LINES	30	73	2	GREEN, DASHED THIN LINE
GOLF COURSES	RECREATIONAL LINES	30	81	2	GREEN, DASHED THIN LINE
PROPER NAMES (PARKS, GOLF ETC)	MISC ANNOTATION	31	99	1	WHITE, POINT ANNO
MISC. ANNO (SLAB, BALLFLD, CEMETERY)	MISC ANNOTATION	31	103	1	WHITE, POINT ANNO
MISC ANNOTATION (1"= 400' SCALE)	MISC ANNO (1"=400 SCL)	32	105	1	WHITE POINT ANNO
CNTY BOUNDARY ANNO (1"= 400' SCALE)	MISC ANNO (1"=400 SCL)	32	106	1	WHITE POINT ANNO
MISC ANNOTATION (1"= 1,000' SCALE)	MISC ANNO (1"=1000)	33	107	1	WHITE POINT ANNO
MUNICIPALITY ANNO (1"= 1000' SCALE)	MISC ANNO (1"=1000)	33	108	1	WHITE POINT ANNO
CNTY BOUNDARY ANNO (1" = 1,000' SCL)	MISC ANNO (1"=1000)	33	109	1	WHITE POINT ANNO
MISC ANNOTATION (1" = 2,000' SCALE)	MISC ANNO (1"=2000)	34	110	1	WHITE POINT ANNO
MUNICIPALITY ANNO (1" = 2,000' SCALE)	MISC ANNO (1"=2000)	34	111	1	WHITE POINT ANNO
CNTY BOUNDARY ANNO (1"= 2000' SCALE)	MISC ANNO (1"= 2000)	34	112	1	WHITE POINT ANNO
COUNTY BOUNDARY LINES	CIVIL AREA LINES	35	52	3	RED, BOLD DASHED LINE
CORPORATION LINES	CIVIL AREA LINES	35	53	1	WHITE, THICK DASHED LINE
CIVIL TOWNSHIP LINES	CIVIL AREA LINES	35	67	2	RED, THICK DASHED LINE

DATA LAYER LIST

DATA ITEM	DATA LAYER	LAYER	LINE	PEN	DESCRIPTION
HORIZONTAL CONTROL	GEODETIC CONTROL SYM	36	20	3	SYMBOL (ATTRIBUTE)
COMB HORIZONTAL/VERTICAL CONTROL	GEODETIC CONTROL SYM	36	21	3	SYMBOL (ATTRIBUTE)
VERTICAL CONTROL	GEODETIC CONTROL SYM	36	22	3	SYMBOL (ATTRIBUTE)
SECTION LINES/VMS BOUNDARY	SURVEY AREA LINES	38	66	7	MAGENTA, DASHED LINE
SURVEY (NUMERICAL) TOWNSHIP BNDRY	SURVEY AREA LINES	38	68	7	MAGENTA DASHED LINE
TAX DISTRICT ANNOTATION	CIVIL AREA LINE ANNO	39	32	6	BLUE, LEROY, VERTICAL
SECTION LABELS	CIVIL AREA LINE ANNO	39	73	7	MAGENTA, LEROY, VERTICAL
CORP/TOWNSHIP/RANGE ANNOTATION	CIVIL AREA LINE ANNO	39	75	3	RED, LEROY, VERTICAL
VIRGINIA MILITARY SURVEY (VMS) LABELS	CIVIL AREA LINE ANNO	39	76	7	MAGENTA, LEROY, VERTICAL
COUNTY BOUNDARY ANNOTATION	CIVIL AREA LINE ANNO	39	104	1	WHITE, LEROY, VERTICAL
TAX DISTRICT BOUNDARIES	TAX DISTRICT BOUNDARIE	40	49	6	BLUE, DASHED LINE
SUBDIVISION BOUNDARIES	SUBD BOUNDARIES	42	54	2	GREEN, DASHED LINE
CONDOMINIUM BOUNDARIES	SUBD BOUNDARIES	42	55	5	RED, DASHED LINE
SUBDIVISION CENTROIDS	SUBD CENTROIDS	43	32	2	GREEN, LEROY, SLANTED
INVISIBLE THEMATICS	THEMATICS	43	58	3	RED DOT
SUPPLEMENTAL PARCEL ANNOTATION	MISC APPRAISAL ANNO	44	121	3	RED, LEROY, VERTICAL
SUPP SUBDIVISION LABELS (UNRECORDED)	MISC APPRAISAL ANNO	44	123	2	GREEN, LEROY, SLANTED
SUPP SUBDIVISION LABELS (DESTROYED)	MISC APPRAISAL ANNO	44	124	2	GREEN, LEROY, SLANTED
SUPP SUBDIV LABELS (NON-CONTIGUOUS)	MISC APPRAISAL ANNO	44	125	2	GREEN, LEROY, SLANTED
RIGHT-OF-WAY LINES	RIGHTS-OF-WAY	45	59	1	WHITE, THIN LINE
RIGHT-OF-WAY DIMENSIONS	RIGHT-OF-WAY ANNO	46	15	5	ORANGE, LEROY, VERTICAL
SUPP (HISTORICAL) R.O.W LABEL	RIGHT-OF-WAY ANNO	46	26	1	WHITE, LEROY, SLANTED
PROPER-NAMED ALLEY LABEL	RIGHT-OF-WAY ANNO	46	51	1	WHITE, LEROY, VERTICAL
PLATTED-UNCONS RIGHT-OF-WAY LABEL	RIGHT-OF-WAY ANNO	46	52	1	WHITE, LEROY, VERTICAL
LEASE (FOR TAXATION ONLY) PARCELS	PARCELS	47	33	6	BLUE, THIN LINE
PARCEL LINES	PARCELS	47	60	7	MAGENTA, THIN LINE
RAILROAD RIGHT-OF-WAY LINES	PARCELS	47	61	2	GREEN, THIN LINE
PARCEL LINES (INTERNAL APPLICATION)	PARCELS	47	160	7	MAGENTA, DASHED LINE
PARCEL SPLIT DIMENSIONS	PARCEL ANNOTATION	48	6	1	WHITE, LEROY, VERTICAL
PARCEL DIMENSIONS	PARCEL ANNOTATION	48	16	1	WHITE, LEROY, VERTICAL
HALF LAND HOOKS	PARCEL SYMBOLOGY	50	34	4	YELLOW, HOOKS
FULL LAND HOOKS	PARCEL SYMBOLOGY	50	35	4	YELLOW, HOOKS
DIMENSION MARKER	PARCEL SYMBOLOGY	50	36	4	YELLOW, HOOKS
LEADER LINES	PARCEL LEADER LINES	51	63	6	BLUE, THIN LINE
VACATED RIGHT-OF-WAY LINES	SUBDIVISION LOT LINES	52	62	5	ORANGE, THIN DASHED LINE
ORIGINAL SUBDIVISION LOT LINES	SUBDIVISION LOT LINES	52	64	2	GREEN, THIN DASHED LINE
ORIGINAL ACREAGE TRACT LINES	SUBDIVISION LOT LINES	52	67	3	RED, THIN DASHED LINE
SUPPLEMENTAL RIGHT-OF-WAY	SUBDIVISION LOT LINES	52	82	5	ORANGE, THIN LINE
ORIGINAL SUBDIVISION LOT NUMBERS	SUBDIVISION LOT NUMBER	53	30	2	GREEN, LEROY, SLANTED
VACATED RIGHT-OF-WAY ANNOTATION	SUBDIVISION LOT NUMBER	53	72	5	ORANGE, LEROY, VERTICAL
ORIGINAL SUBDIVISION BLOCK NUMBERS	SUBDIVISION LOT NUMBER	53	74	2	GREEN, LEROY, SLANTED
SPECIAL CASE BLOCK NUMBERS	SPECIAL CASE BLOCK NUM	53	206	2	GREEN, NUMBERS
CROSS-COUNTRY EASEMENTS	EASEMENT LINES	54	65	7	MAGENTA,THIN DASHED LINE
EASEMENT ANNOTATION	EASEMENT ANNOTATION	55	71	7	MAGENTA, LEROY, VERTICAL
CONDO CENTROID UNITS	DOTS ON FACETLINE	56	58	2	GREEN, SYMBOL
CONDO CENTROID UNITS	CONDO CENTROIDS	56	59	2	GREEN, SYMBOL
CONDOMINIUM PARCEL CENTROIDS	CONDO PID CENTROIDS	57	33	3	RED, SYMBOL
MULTIPLE CONDO SYMBOLS (INTERNAL)	MULTIPLE CONDO SYMBOL	57	59	3	RED, DOT
CONDO DIVISION LINES	CONDO UNITS	58	23	7	PURPLE, THIN LINE

DATA LAYER LIST

DATA ITEM	DATA LAYER	LAYER	LINE	PEN	DESCRIPTION
RIGHT-OF-WAY CENTERLINES	R-O-W CENTERLINES	59	48	5	ORANGE, THIN DASHED LINE
RIGHT-OF-WAY DROP SYMBOLS	R-O-W DROP SYMBOLS	61	61	5	ORANGE, SYMBOL
PARCEL CENTROID	PARCEL CENTROIDS	65	9	5	ORANGE, SYMBOL
SPECIAL CASE BLOCK NUMBERS	SPECIAL CASE SYMBOLS	65	58		RED, DOT
SUPPLEMENTAL PARCEL CENTROID	PARCEL CENTROIDS	65	59	3	RED, SYMBOL
FLOODWAY, 100, 500 FLOODPLAINS	FEMA	66	182	6	BLUE, SEE FEMA LEGEND
UNDERGROUND TANKS (LEAKING)	HAZARDOUS SYMBOLS	83	83	7	MAGENTA, SYMBOL
UNDERGROUND TANKS (REGISTERED)	HAZARDOUS SYMBOLS	83	83	7	MAGENTA, SYMBOL
ENGINEER'S GRAPHIC MONUMENT SYMBOL	MONUMENT SYMBOLS	152	63	-	MULTIPLE SYMBOLS
ENGINEER'S GRAPHIC MONUMENT TEXT	MONUMENT SYMBOLS	153	16	1	WHITE, ANNO
EASEMENT SYMBOLS	EASEMENT SYMBOLS	155	62	4	YELLOW, SYMBOL
Revised July, 2004					

JOSEPH W. TESTA
FRANKLIN COUNTY AUDITOR
GEOGRAPHIC INFORMATION SYSTEM (GIS)
LEGEND

PLANIMETRIC FEATURES

STREETS
- Airfields Pavement (Runways)
- Airfields Pavement (Aprons)
- Airfields (Unpaved Runways)
- Roadways (Paved)
- Roadways (Unpaved)
- Alleys (Paved)
- Alleys (Unpaved)
- Alleys (Updated)
- Nonverified Roadways
- Overpasses / Bridges
- Roadways Under Construction
- Public Road Centerlines & Names — HIGH ST
- Private Road Centerlines & Names — MAIN ST
- Road Centerline Intersections
- Temp Road Centerlines & Names — DANBY
- Temp Pvt Rd Centerlines & Names — WOODMARK

DRIVES / WALKWAYS
- Footbridges, Walkways, Bike Paths
- Drives, Parking (Updated)
- Drives, Parking Lots (Paved)
- Drives, Parking Lots (Unpaved)
- Drives, Parking Under Construction
- Highway Berms (Paved)
- Parking Lot Labels — Parking
- Supplemental Trans Annotation — West Trail

BUILDINGS
- Building Outlines (Named)
- Primary Buildings (Updated)
- Primary Buildings (Under Const)
- Building Outlines (Secondary)
- Updated Misc Structures
- Misc Structures (Towers Etc)
- Misc Structure Anno — Water Tower
- Major Retaining Walls
- Dams
- Flood Walls
- Roof Separations
- Substations

RAILROADS
- Railroads
- Railroads (Abandoned)
- Railroad Right-Of-Way Lines

RECREATION
- Recreational Areas
- Recreation Surfaces (Paved)
- Recreation Surfaces (Unpaved)
- Golf Courses
- Swimming Pools
- Proper Names (Parks Etc) — Schiller Park

MISCELLANEOUS
- Sanitary Manholes
- Telephone Manholes
- Poles
- Manholes
- Structures (Utility)
- Pipelines (Major)
- Cemetery Boundries
- Monuments

PROPERTY FEATURES

BOUNDARY LINES
- County Boundary Lines
- County Boundary Anno — FRANKLIN COUNTY
- Corporation Lines
- Corp / Township Anno — CORP LIMITS
- Civil Township Lines

SURVEY LINES
- Section Lines / VMS Boundary
- Section Labels — 17 18
- Survey Township Boundary
- Virginia Military Survey Labels — VMS 1393
  (VMS - Virginia Military Survey)

TAX DISTRICTS
- Tax District Boundaries
- Tax District Anno — 025

SUBDIVISIONS
- Subdivision Boundaries
- Subdivision Centroids — SUB 2A
- Original Subdivision Lot Lines
- Original Subdivision Lot Numbers — 551 12
- Original Subdivision Block Numbers — AMD PLAT
- Supp Subd Labels (Unrecorded) — Destroyed
- Supp Subd Labels (Destroyed) — North Grant
- Supp Subd Labels (Non-Contiguous)
- Condominium Boundaries

PARCELS
- Parcel Lines
- Parcel Centroid — 010-007167
- Parcel Dimensions
- Parcel Split Dimensions — (155.112)
- Parcel Leader Lines
- Lease Parcels (For Taxation Only)
- Condominium Parcel Centroids
- Dimension Markers
- Full Land Hooks
- Half Land Hooks
- Original Acreage Tract Lines

RIGHT-OF-WAY
- Right-Of-Way Lines
- Right-Of-Way Centerlines
- Right-Of-Way Dimensions — 60
- Right-Of-Way Label (Historical) — (Well St)
- Right-Of-Way Drop Symbols — D
- Supplemental Right-Of-Way
- Vacated Right-Of-Way Lines
- Vacated Right-Of-Way Annotation — VAC 6-9-82
- Proper-Named Alley Label — WEST AL
- Platted-Unconstructed ROW Label — FIRST AV

MAJOR EASEMENTS
- Cross-Country Easements
- Easement Annotation — COLUMBUS & SOUTHERN

TOPOGRAPHIC FEATURES

CONTOURS
- Intermediate Contours
- Index Contours
- Hidden Intermediate Contours
- Hidden Index Contours
- Intermediate Dep Contours
- Index Depression Contours
- Hidden Inter Dep Contours
- Hidden Index Dep Contours
- Spot Elevations
- Hidden Spot Elevations

WATERWAYS / DRAINAGE
- Streams, Rivers, Creeks etc.
- Swamps
- Drainage / Swamp Outlines — W.E. 721.2
- Water Elevations — DARBY DITCH
- Hydrography Annotation — HAYNES SWAMP
- Swamp Annotation

CONTROL SYMBOLS
- Horizontal Control
- Vertical Control
- Combo Horizontal/Vertical control

UTILITIES

UTILITIES - WATER
- Fire Hydrants
- Fire Hydrants (Ret Basin)
- Fire Hydrants (Updated)
- Valves
- Water Manholes

UTILITIES - STORM
- Storm Manholes
- Catch Basins / Curb Inlets
- Ends Of Pipe
- Headwalls
- Paved Drainage Ditches
- Misc Drainage Structures

UTILITIES - ELECTRIC
- Utility Poles
- Electric Manholes
- Satellite Dishes
- Antennas (Commercial)
- Transmission Lines

UTILITIES - GAS
- Manholes
- Valves

EXTERNAL AGENCYS

Franklin County Engineers
- Survey Monument Symbols — FCGS 7745
- Survey Monument Annotation
- Roadway Easement Symbol — E

Ohio EPA
- Hazardous Symbols — H

State Fire Marshall
- Underground Tanks — UT

Federal Emergency Management Agency (FEMA)
- Water — Dark Blue Shading
- Floodway — Medium Blue Shading
- Flood Plane Shading 100 Year — Light Blue Shading
- Flood Plane Shading 500 Year — Sky Blue Shading

GLOSSARY OF GIS TERMS

NOTE: The following list does not represent a complete explanation of technical GIS vocabulary, but is instead representative of words and abbreviations commonly used by the GIS Department. It is not our intention to cover all possible meanings nor guarantee that all definitions are technically correct.

Analytic Triangulation	**A method of ground control extension or densification that is performed mathematically and in conjunction with existing ground control.**
Annotation	**Textual information contained in the database (i.e., with labels and names).**
Attribute	**A term for information consisting of text and numbers that can be searched and sorted based on specific criteria. This non-graphic data can be linked to the graphic data.**
Attribute Annotation	**Display of attributes attached to an attribute data type (see attribute data type).**
Attribute Data Type	**Data that consists of graphic elements that have specific textual data associated with them; also called a facility data type.**
AutoCAD	**A commercial software 'CAD' product that is widely used throughout the GIS industry.**
Azimuth	**The horizontal direction of a line measured clockwise from a reference plane, usually the meridian. Used with a survey control point.**
Base Line	**A carefully surveyed reference line upon which land surveys are based.**
Base Map	**A map containing a variety of features used for locational reference. Base maps typically include streets, buildings, topography, hydrography, etc.**
Bearing	**Number of degrees from 0 degrees to 90 degrees east or west of a north/south line.**
Bench Mark	**A permanently marked metal disk in the ground showing an established elevation control point.**
CAD	**Computer Aided Design. An automated system for the design, drafting and display of graphically oriented information. Also known as Computer Aided Design and Drafting (CADD).**
Cadastral	**A survey relating to land boundaries and subdivisions. Made to create units suitable for transfer or to define the limitations of title. Derived from cadastre (meaning register of the real property of a political subdivision with details of area, ownership, and value), the term is now used to designate the surveys of the public lands of the United States, including retracement surveys for the identification and resurveys for the restoration of property lines.**
Cadastral Data/Maps	**Data that pertains to the delineation of property ownership, i.e., lot lines, parcel lines, subdivision boundaries; also referred to as appraisal information. Graphic depiction of the cadastral information is shown on 'property maps.'**
Cartography	**The art and science of expressing graphically, by maps and charts, the known physical features of the earth.**

GLOSSARY OF GIS TERMS cont.

Centroid	**A graphic symbol, usually a dot, which can be accessed to retrieve attribute data (as in 'property centroid').**
COGO	**1) An abbreviation for Coordinate Geometry that refers to a system's ability to perform geometric functions, using coordinate points established in the database (see also coordinate system). 2) A coordinate geometry software package typically used by land surveyors to enter distances and bearings from reference points to calculate location points.**
Composite	**Hard-copy product made by registering two or more overlays to produce one map with combined data.**
Contour Interval	**The difference in elevation between adjacent contours.**
Contours	**Map lines that connect areas of equal elevation (expressed in feet above sea level). Often shown with spot elevations.**
Control	**A system of points with established positions or elevations or both, which are used as fixed references for position and correlating map features (ground control).**
Coordinate System	**A reference system which determines a specific numeric designation (coordinate) for any point within a geographically referenced area, based on its location relative to all other points in that area.**
Coordinate	**A set of numbers that determines the location of a point on a grid. Coordinates are used to arrange points into the proper relative positions to each other.**
Criteria Map	**A map, which utilizes graphic data combined with the 'intelligence' associated with corresponding nongraphic data, to produce a plot, which graphically depicts the statistical situation that has been programmed into the computer.**
Data Item	**A delineation of data within a data layer. In MetaMAP, it is possible to differentiate 256 data items within each data layer; i.e., 08011 paved roadways and 08012 unpaved roadways are two of the data items within data layer 08 – primary transportation. Assigned data may be graphic and/or nongraphic elements.**
Data Layer	**Refers to data having similar characteristic being contained in the same plane or overlay (e.g. roads, rivers). Usually information contained in a data layer is related and designed to be used with other layers.**
Diapositive	**A positive photograph on a transparent medium, usually polyester or glass. The term is generally used to refer to a transparency used in a plotting instrument, a projector or a comparator.**
Digitize	**A process involving a sensitized table and a cursor with crosshairs and keys used to electronically record the geographic locations of map features as x, y coordinates.**
DTM	**Digital Terrain Model. A land surface represented in digital form by an elevation grid or lists of 3-D coordinates.**
DWG File	**An AutoCAD drawing file named for its 'DWG' extension.**

GLOSSARY OF GIS TERMS cont.

DXF File	**An AutoCAD drawing exchange file named for its DXF extension.**
Edgematching	**Editing procedure for connecting arcs and polygons that cross tie boundaries. Ensures the features intersect the boundary at a common, coincident point. Allows features to be viewed in their entirety.**
Element	**The term for a graphic component in a design. An element can be a circle, an arc, a line, an ellipse, or even a complex group of these parts. The computer sees and manipulates an element as a single unit.**
Elevation	**The vertical distance of a point on the ground as measured above sea level. Differs from 'altitude,' which is a measurement of a point above the ground.**
Facet	**A standard grid unit into which information is geographically referenced for storage in the database. The Franklin County database is made up of 2,620 facets, each measuring 2,500 ft. by 2,500 ft., based upon State Plane Coordinates.**
Facility Data Type	**See 'Attribute Data Type.'**
Flat File	**A tabular data structure commonly used as an interchange format for the loading and exchange of digital data; also called a sequential file. (Flat files have no intelligence.)**
Geocode	**A spatial index code (e.g., addresses, parcel numbers) identifying unique points, lines or areas that are stored in both graphic and nongraphic data.**
GIS	**Geographic Information System. A computer graphics system that allows the input, query, manipulation, display and output of geographically referenced information. A GIS is a database of geographic features stored as a series of relationships.**
GPS	**Global Positioning System. A survey system that measures point locations and distances on earth by use of extremely accurate survey satellites and sensitive ground receivers.**
Graphic Element	**A single line, curve, shape or symbol used to pictorially represent an item, such as a valve, water line or building.**
Graphic Annotation	**Text that appears on a map as part of the map's features.**
Hydrology	**Lakes, streams, swamps and other drainage features. "Hydrography" – the symbols and outlines representing these features on a map.**
Index (Map)	**A numbered grid over a base map used to locate a hard copy or facet map in the computer. (The Franklin County Auditor's map has two indexes – facet indexes for the computer a polygon index for hard-copy plots).**
Interpolate	**Logical judgment assigned to an unknown point, by use of data from two or more known points.**
Latitude/Longitude	**Latitude is the north-south measurement of the earth parallel to the equator. Longitude is the east-west measurement of the earth measured from the Greenwich Meridian, in Greenwich, England, where the system was created. Conceptually latitude/longitude can be thought of as a 'global state plane grid.'**

GLOSSARY OF GIS TERMS cont.

Layering	**A method of logically organizing a computer graphics database by 'overlaying' each group of information one on top of the other.**
MetaMAP®	**A commercial full-function PC-based GIS software program.**
Metes and Bounds	**A method of describing a parcel boundary by means of distance, direction and land references. Especially useful in describing irregularly shaped parcels.**
Monument	**A boundary marker either natural (river, stone, etc.) or man-made (post, iron pin, etc.) used to document a survey description.**
National Map	**A comprehensive document produced by the National Geodetic Survey that outlines stringent accuracy standards and tolerances that are expected to be adhered to by the mapping industry.**
Node	**Similar to access centroid, except its geographic location is registered (e.g., DAM uses nodes to access street intersections).**
Nonfacility Data Type	**A data type that contains only graphic data elements with no associated attribute data.**
Northing/Easting	**Survey term for the longitude and latitude coordinate numbers that appear on the margins of our hard copy standard plots. The Auditor's Office uses these numbers to name facets.**
Orthophotograph	**A photograph that has been scale-corrected so that image displacement caused by camera tilt and relief of terrain are removed.**
Parcel	**A map feature depicting land ownership and rights. Parcel boundaries usually are described in narrative form on a deed as metes and bounds or bearings and distances.**
Parcel Identifier	**A number scheme for identifying parcels in a computer system. Parcel identification schemes range from a simple sequential number to a geocode that also defines location by incorporating x and y coordinates for the parcel.**
Photo Control Points	**Aerial photo, which has ground, coordinates that have been identified by a ground control survey. These points must be identifiable on the photographs either by flagging (targeting) or well-defined points (for example, the corner of a sidewalk, the base of a pole, etc.).**
Photogammetry	**The art, science and technology of obtaining reliable information about physical objects and the environment, through processes of recording, measuring and interpreting images and patterns of 'electromagnetic radiant energy' (usually photography). The most common form of photogrammetry is aerial photographic mapping.**
Pixel	**Short for 'picture element.' The smallest visual element (illuminated dot), which makes up an image on a computer screen.**
Planimetric	**The cultural (man-made) and hydrological (lakes, rivers, streams, ponds) features of the earth.**
Planimetric Map	**A map that represents the horizontal position of 'man-made' (cultural) features like streets and buildings, combined with natural features such as lakes and rivers (hydrography). It is different from a topographic map because of the omission of measurable relief.**
Plat	**A scale diagram void of cultural, drainage and relief features, showing only land boundaries and subdivisions together with data essential to the legal description.**

GLOSSARY OF GIS TERMS cont.

Plot File	**A stored image comprised of graphic elements selected from the base map. Plot files can be plotted on a plotter to create an accurate hard copy representation of the stored image.**
Polygon	**1) A map sheet east of the Scioto River, covering an area slightly larger than a facet that aligns street surveys parallel with the edge of the sheet. Numbered by Section, Township, Range, etc.** **2) Any area that has three or more sides and is closed.**
Quads	**Quadrangle Maps. A rectangular or nearly rectangular area covered by a map or plat, usually bounded by given meridians of longitude and parallels of latitude. The U.S. Geological Survey Quads are the most common example.**
Raster	**A grid-type data format used to interpret gray-scale photographs and other documents. Imagery is stored as dots or pixels, each with a different shade or density. This structure is commonly used to store image data, and is usually captured by use of a video scanner.**
Ratio Scale	**A statement of distance measured on a map and the equivalent distance measured on the earth, expressed as a representative fraction, such as 1:24,000. This means that one unit of distance on the map represents 24,000 of the same units of distance on the earth. To convert to inches and feet, divide by 12; thus 1" = 2,000'.**
Remote Sensing	**Recording and analyzing image data from a distance. Aerial photography is the most common form of remote sensing.**
Resolution	**The smallest spacing between two display elements that will allow the elements to be distinguished visually on the CRT.**
Rubber Sheeting	**A procedure to adjust the features of a map in a nonuniform manner. Often referred to as 'forced fit.'**
Scale	**The relationship between the sizes of the original (ground) of the reproduction (map).**
Schema	**Determines what type of data is sorted in the database and how that data is organized.**
Schematic Map	**A map showing the general layout of items relative to each other, without detailed or accurate control work. For example, utility mapping is usually in schematic form.**
Shapefile	**Translation file consisting of three files .shp; .shx; .dbf. Utilized for data distribution purposes.**
Source Material	**Information or data known to be available. Empirical or 'off-the-shelf' resources such as library files and official records.**
Spatial Data	**Information about the location, shape and relationships among geographic features, usually stored as coordinates and topography.**
Spot Elevations	**Points on a map that depict elevation above sea level for that location.**

GLOSSARY OF GIS TERMS cont.

State Plane Coordinate System	**A standard survey grid covering the entire United States, with a separate system of coordinates for each site.**
Stereoplotter	**An optical device used in photogrammetric mapping to digitize the horizontal position and elevation of selected points and features visible in aerial photographs. Creates maps by use of aerial photography.**
Table Driven System	**A system that stores graphic data and their representations (line patterns, fonts and colors) independently of each other, thus allowing a multitude of display options while reducing unnecessary database storage.**
Target	**A 'T' or '+' shaped marking placed on the ground over a geodetic or ground-point marker, to be later identified on an aerial photograph. Also called 'flagging.'**
Thematic Map	**1) A map depicting a particular set of circumstances or theme. Also, see criteria map. 2) A map related to a specific topic, theme or subject. Also called criteria, special purpose or distribution maps. Thematic maps emphasize a single topic such as vegetation types, geology characteristics, and land use or land values.**
TIGER	**Topologically Integrated Geographic Encoding and Referencing. Data format used by the U.S. Census Bureau to support census programs and surveys. TIGER files contain street address ranges along lines and census tract and block boundaries. This descriptive data can be used to associate address information, census, and demographic data to coverage features.**
Topographic	**Collective features of the earth, including hypsography (relief features such as contours and spot elevations), hydrography (water and drainage features), planimetric (cultural and man-made features) and geodetic (all pertinent survey control points and geographic boundaries).**
Topographic Map	**Map that combines planimetric detail with contours to show the relief of the land.**
Township/Range/ Tier/Section	**Township is the basic unit of the rectangular survey system established by the federal government. Range is a column of townships extending north and south. Tier is a row of townships extending east and west. Section is a subdivision of a township.**
Triangulation	**See Analytic Triangulation.**
Vector	**A coordinate-based (x, y linear feature) structure commonly used to represent map features.**
VMS	**1) Virginia Military Survey. One of four early land survey systems used when dividing land for the original settlers of Franklin County. 2) Virtual Memory System. The capability of a computer system's main memory to access and efficiently use data and programs stored separately on disk drives. Virtual storage techniques allow a processor to handle large programs and data sets from multiple users. Programs are segmented in 'pages' that can be accessed by main memory and retrieved separately from auxiliary.**
'XYZ' Axis	**Directional orientation under which all geographic information is recorded in the database as follows: 'X' = horizontal (east/west), 'Y' = vertical (north/south), 'Z' = elevation (relief).**

Franklin County Auditor
Joseph W. Testa

Geographic Information System
373 South High Street
Columbus, Ohio 43215-6310
Tel.: 614/462-7272
Fax: 614/462-7298
www.franklincountyauditor.gov

GIS Products Request Form

Date: _____

Contact Person: _____ **Telephone:** _____

Organization / Department: _____

Address: _____
Street / p.o. box / bldg. City state zip

CD ROM SELECTION	NUMBER OF SETS	COST / CD	TOTAL
_____**DXF** (drawing exchange format) Quarter: _____ Date:_____	_____	$10.00 ea.	_____
_____**Metamap for Windows** Quarter: _____ Date:_____	_____	$10.00 ea.	_____
_____**Orthophotography 2000** JPEG _____ Mr SID_____	_____	$10.00 ea.	_____
_____**Shape Files** Quarter:_____ Date:_____	_____	$10.00 ea.	_____

CUSTOM SERVICES	FACET NUMBERS	SCALE	COST
_____**Thematic Mapping**	Define Area Below	_____	_____
_____**Special Plotting**	Define Area Below	_____	_____
_____**Computer Reports**	List Area Below	_____	_____
_____**E-Size** (30”x36”) **Orthophoto**	_____	_____	_____
_____**Other**	_____	_____	_____

Additional instructions: Use this space to explain area, data layers, color criteria, media, etc.

Received By: _____ **Total Cost:** _____

I hereby request a GIS map product, as indicated above, from the Franklin County Auditor's Office. I understand that, due to plotting time, the display of certain data items may be restricted. I further understand that the digital files from which these plots are produced are not final and may not have passed all of the Franklin County Auditor's quality control procedures. I agree to report any observed discrepancies to the GIS Department.

Revised July, 2004